

State of California
Department of Fish and Wildlife



Memorandum

Date: March 1, 2021

Governor's Office of Planning & Research

Mar 02 2021

To: Mr. Charles Winter
California Department of Transportation
District 4; Environmental Planning
Post Office Box 24660; MS-8B
Oakland, CA 94623
Charles.Winter@dot.ca.gov

STATE CLEARINGHOUSE

DocuSigned by:

Gregg Erickson

From: Mr. Gregg Erickson, Regional Manager

California Department of Fish and Wildlife-Bay Delta Region, 2825 Cordelia Road, Suite 100, Fairfield, CA 94534

Subject: Interstate – 880 Improvements Project – Whipple Road – Industrial Parkway Southwest and Industrial Parkway West Initial Study/Negative Declaration, SCH No. 2021010214, Alameda County

The California Department of Fish and Wildlife (CDFW) has reviewed the proposed draft Initial Study/Negative Declaration (IS/ND) for the Interstate – 880 Improvements Project – Whipple Road – Industrial Parkway Southwest and Industrial Parkway West (Project) pursuant to the California Environmental Quality Act (CEQA) and CEQA Guidelines.¹ CDFW is submitting comments on the IS/ND as a means to inform the California Department of Transportation (Caltrans) as the Lead Agency, of our concerns regarding potentially significant impacts to sensitive resources associated with the proposed Project.

CDFW is a Trustee Agency with responsibility under CEQA §15386 for commenting on projects that could impact fish, plant and wildlife resources. CDFW is also considered a Responsible Agency if a project would require discretionary approval, such as permits issued under the California Endangered Species Act (CESA), the Native Plant Protection Act, the Lake and Streambed Alteration (LSA) Program and other provisions of the Fish and Game Code that afford protection to the State's fish and wildlife trust resources. Pursuant to our jurisdiction, CDFW has the following concerns, comments, and recommendations regarding the Project.

PROJECT LOCATION AND DESCRIPTION

Caltrans, as the lead agency, proposes improvements along Interstate – 880 (I-880) from 0.6 miles south of the I-880/Whipple Road – Industrial Parkway Southwest Intersection to 0.3 miles north of the I-880/Industrial Parkway West Interchange from post mile (PM) 13.04 to PM 14.75 in the City of Hayward and Union City, Alameda County, California.

¹ CEQA is codified in the California Public Resources Code in section 21000 et seq. The "CEQA Guidelines" are found in Title 14 of the California Code of Regulations, commencing with section 15000.

Mr. Charles Winter
California Department of Transportation

2

March 1, 2021

The Project will include interchange, on- and off-ramp reconfigurations, modifications or replacements of bridge structures, local roadway realignments, restriping, and bicycle pedestrian improvements. Caltrans as the lead agency, acting on behalf of the Alameda County Transportation Commission, City of Hayward and Union City has proposed three alternatives for the configurations, roadway realignments and other modifications along I-880, auxiliary and surface roads as noted is the IS/ND.

LAKE AND STREAMBED ALTERATION AGREEMENT

The Project has the potential to impact stream resources including mainstems, tributaries and floodplains associated with Ward Creek and Old Alameda Creek known to occur within the identified limits of the Project. If work is proposed that will impact the bed, bank, channel or riparian habitat, including the trimming or removal of trees and riparian vegetation please be advised that the proposed Project may be subject to LSA Notification. This includes impacts to drainage systems that connect to tributaries of main stem creeks and tributaries that occur within the Project Biological Study Area (BSA). CDFW requires an LSA Notification, pursuant to Fish and Game Code section 1600 et. seq., for or any activity that may substantially divert or obstruct the natural flow; change or use material from the bed, bank or channel or deposit or dispose of material where it may pass into a river, lake or stream. Work within ephemeral streams, washes, watercourses with a subsurface flow, and floodplains are generally subject to notification requirements.

ENVIRONMENTAL SETTING

Sufficient information regarding the environmental setting is necessary to understand the Project, and its alternative's (if applicable), significant impacts on the environment (CEQA Guidelines, §§15125 and 15360). CDFW recommends that the CEQA document prepared for the Project provide baseline habitat assessments for special-status plant, fish, and wildlife species located and potentially located within the Project area and surrounding lands, including all rare, threatened, or endangered species (CEQA Guidelines, §15380). Threatened, endangered, and other special-status species that are known to occur, or have the potential to occur in or near the Project site, include, but are not limited to:

- Roosting bats
- Townsend's big-eared bat (*Corynorhinus townsendii*), SSC
- Nesting birds

FE = Federally Endangered; FT = Federally Threatened; FC = Federal Candidate Species; SE = State Endangered; SFP = State Fully Protected; SSC = State Species of Special Concern

CDFW recommends that prior to Project implementation surveys be conducted for special-status species noted in this comment letter with potential to occur, following

Mr. Charles Winter
California Department of Transportation

3

March 1, 2021

recommended survey protocols if available. Survey and monitoring protocols and guidelines are available at: <https://www.wildlife.ca.gov/Conservation/Survey-Protocols>.

COMMENTS AND RECOMMENDATIONS

CDFW acting as a Responsible Agency, has discretionary approval under CESA through issuance of a CESA Incidental Take Permit and LSA Agreement, as well as other provisions of the Fish and Game Code that afford protection to the State's fish and wildlife resources. CDFW would like to thank you for preparing the IS/ND and CDFW recommends the following updates, avoidance and minimization measures be imposed as conditions of Project approval by the lead agency, Caltrans, to ensure all Project-related impacts are mitigated to below a level of significance under CEQA:

COMMENT 1: Project Design Analysis and CEQA Documentation

Issue: The proposed alternatives 1, 2 or 3 in the IS/ND present no difference in the impacts at Ward Creek. All alternatives propose to fill, grade and relocate Ward Creek along an approximate 1,000 linear feet segment of channel, 75 feet to the east and remove a similar number of trees (299 to 310 trees). The fill, grading and relocation of Ward Creek constitutes a significant impact that would require mitigation to reduce the impacts to less-than-significant. In addition, please consider the standards identified in CEQA Guidelines section 15073.5, which describe the process for adding and expanding mitigation measures, and as necessary, recirculation of a Mitigated Negative Declaration or preparation of an Environmental Impact Report.

Evidence the impact would be significant: The reconfiguration of approximately 1,000 linear feet of Ward Creek and its associated floodplain is a potentially significant impact that may affect natural stream processes and permanently modify layers of alluvium, sediment bed-load and biological resources. The excavation of alluvium has the potential to change stream profiles, flow regimes and result in changes to sediment supply and the sediment carrying capacity of the channel (Bidenhard,1997). These alterations can further decrease channel diversity and by association decrease the habitat available for biological resources.

Recommendation 1 – Explore Project Alternatives and CEQA Alternatives:

CDFW requests additional design alternatives are explored, for example, shifting all lanes West instead of encroaching upon Ward Creek may be a feasible option to avoid potentially significant impacts. CDFW currently prefers the no build alternative, as all other alternatives create temporary and permanent impacts to Ward Creek. If the Project will result in the reconfiguration of Ward Creek as proposed, the CEQA document should identify these impacts as potentially significant and require the mitigation described below which as responsible agency issuing a LSA CDFW will require.

Mr. Charles Winter
California Department of Transportation

4

March 1, 2021

Recommendation Mitigation Measure 1 – Design Coordination:

CDFW recommends incorporation of a condition of approval in the IS/ND to engage in early and continued coordination with the CDFW Conservation Engineering Branch to provide the proper review and analysis of the proposed bridge(s) placement and bridge(s) design at Ward Creek and Old Alameda Creek. Once a design is selected engineered drawings and design specification planning sheets should be provided to CDFW through continued coordination during the design and permitting process for review and comment.

Recommendation Mitigation Measure 2 – Design Coordination Ward Creek:

Reconfiguration and relocation of Ward Creek and the floodplain would require compensatory mitigation and restoration to migrate for the habitat impacted. A detailed channel design and enhancement plan should be included in the updated IS/ND to mitigate project impacts to Ward Creek. The plan should include engineered designs for enhancement of 3,000 linear feet of channel, require native species plantings, propose a 5- to 10-year monitoring schedule with success criteria and incorporate removal of invasive species. Alternatives may be accepted upon request and approval from CDFW, such as, removal of fish passage barriers, permanent conservation of habitat or conservation/mitigation bank credit purchase from a CDFW approved conservation/mitigation bank.

COMMENT 2: Nesting Bird Impacts and Tree Removals

Issue: Alternatives 1, 2 and 3 propose tree removal estimates of 299 to 310 trees, according to page 2.3-6 of the IS/ND. From an impact analysis standpoint there is little difference amongst the three alternatives for tree removal. CDFW recommends reducing proposed tree removals where feasible and the incorporation of a specific tree enhancement and replanting plan in an updated CEQA document.

Evidence the impact would be significant: Tree removal estimates of 299 to 310 trees is a potentially significant impact that can remove nesting habitat for native bird species, roosting habitat for bat species and complex habitat types for a variety of other native species of wildlife. On-site replanting would take multiple seasons for saplings to reach heights and diameters capable of providing suitable bird nesting habitat and bat roosting habitat, therefore, potentially significant impacts may occur due to tree removal.

Recommendation: CDFW recommends a reduction of tree removal numbers across all alternatives and incorporation of tree protection and planting measures within the Caltrans Right of Way (ROW) as feasible. Specifically, CDFW recommends the Project avoid heritage tree and large diameter tree removal to the greatest extent feasible. If tree removal cannot be avoided, a tree planting plan should be incorporated. Tree planting should be considered as a potential impact minimization measure but not sufficient to completely off-set temporal impacts from loss of heritage or other large diameter mature trees. CDFW recommends Project mitigation from loss of heritage or other large diameter mature trees should include off-site preservation of similar trees in perpetuity.

Recommended Mitigation Measure 1: Tree Removal Plan and Survey Report

The Lead Agency should develop and incorporate tree removal map(s) that illustrate from aerial viewpoints trees subject to removal and create a key that corresponds to a tree survey report. The tree survey report should include detailed information on tree common name, scientific name, diameter at breast height (DBH) and health status. The tree survey report should correspond back to the map key with a tree identification number that pinpoints the trees noted in the survey report on the aerial map(s).

Recommended Mitigation Measure 2: Tree Avoidance and Planting Plan

The Lead Agency should develop a tree planting and avoidance plan to reduce and avoid the removal of trees as feasible. Other options such as protecting in place, trimming or limbing trees should be considered. The Lead Agency should also develop a planting plan in coordination with CDFW to determine the appropriate replanting ratio's and monitoring protocol for replacement trees. Potential locations within the floodplain of Ward Creek, Old Alameda Creek or any creeks or tributaries in the watershed connected to Ward Creek as enhancement sites.

Recommended Mitigation Measure 3: Nesting Bird Surveys

A qualified biologist shall conduct pre-construction surveys for active nests no more than seven (7) days prior to the start of construction (including staging and ground disturbance). If a gap of (7) days or more occurs between the surveys and the start or re-initiation of work, the surveys shall be repeated. CDFW also recommends that surveys cover a sufficient area around the Project site to identify nests and determine their nesting status. A sufficient area means any area potentially affected by the Project. Prior to initiation of staging or ground disturbance, CDFW recommends that a qualified biologist conduct a survey to establish a behavioral baseline of all identified nests. Once Project activities begins, CDFW recommends having the qualified biologist continuously monitor nests (daily) to detect behavioral changes resulting from the Project. If behavioral changes occur, CDFW recommends halting the work causing that change and consulting with CDFW and other natural resource agencies for additional avoidance and minimization measures.

Recommended Mitigation Measure 4: Nesting Bird Buffers

CDFW recommends a minimum no-disturbance buffer of 250 feet around active nests of non-listed bird species and a 500-foot no-disturbance buffer around active nests of non-listed raptors. These buffers are advised to remain in place until the breeding season has ended or until a qualified biologist has determined that the birds have fledged and are no longer reliant upon the nest or on-site parental care for survival. Variance from these no-disturbance buffers is possible when there is compelling biological or ecological reason to do so, such as when the Project site would be concealed from a nest site by topography. CDFW recommends that a qualified biologist advise and support any variance from these buffers. Species specific buffers for rare,

Mr. Charles Winter
California Department of Transportation

6

March 1, 2021

threatened, endangered raptors, if discovered on-site, should be developed in consultation with the natural resource agencies.

COMMENT 3: Bat Assessment and Avoidance

Issue: An assessment and analysis section on special-status bat species known to occur within the vicinity of the Project location should be conducted. According to the California National Diversity Database (CNDDDB), potentially suitable habitat exists within the Project according to data sets for predicted habitat, for species such as; pallid bat (*Antrozous pallidus*), western red bat (*Lasiurus blossevillii*) and western mastiff bat (*Eumops perotis*).

Evidence the impact would be significant: The proposed work to remove hundreds of trees and the reconfiguration or replacement of multiple bridges, elevated causeways and elevated interchanges that may contain possible cracks, crevices or voids. Those cracks, crevices or voids may provide suitable roosting habitat for bats and the loss of access to that habitat may create a potentially significant impacts to bats.

Recommendation: To evaluate and avoid potentially significant impacts to bat species CDFW recommends incorporating the following mitigation measures that these measures be made conditions of approval for the Project:

Recommended Mitigation Measure 1: Bat Habitat Assessment

A qualified biologist should conduct a habitat assessment within the Project limits for suitable bat roosting habitat. The habitat assessment shall include a visual inspection of features within 200 feet of the work area for potential roosting features including crevices, portholes, expansion joints and hollow areas (bats need not be present). A section that discusses the results of the suitable habitat assessment and if any bats or signs of bats (feces or staining at entry/exit points) are discovered should be included. The surveys should occur at least two seasons in advance of Project initiation.

Recommended Mitigation Measure 2: Bat Habitat Monitoring

If potentially suitable bat roosting habitat is determined to be present a qualified biologist shall conduct focused surveys at the trees, bridge(s), causeways and interchanges utilizing night-exit survey methods, sound analyzation equipment survey methods and visual inspection within open expansion joints and portholes of the structures from March 1 to April 1 or August 31 to October 15 prior to construction activities. If the focused survey reveals the presence of roosting bats, then the appropriate exclusionary or avoidance measures will be implemented prior to construction during the period between March 1 to April 15 or August 31 to October 15. Potential avoidance methods may include temporary, exclusionary blocking, one-way doors or filling potential cavities with foam. Methods may also include visual monitoring and staging of work at different ends of the Project to avoid work during critical periods of the bat life cycle or to allow roosting habitat to persist undisturbed throughout the

Mr. Charles Winter
California Department of Transportation

7

March 1, 2021

course of construction. Exclusion netting shall not be used as an exclusion method. If presence/absence surveys indicate bat occupancy, then construction should be limited from March 1 through April 15 and/or August 31 through October 15.

Recommended Mitigation Measure 3: Bat Project Avoidance

If active bat roosts are observed at the Project site, at any time, all Project activities should stop until the qualified biologist develops a bat avoidance plan to be implemented at the Project site. Once the plan is implemented, Project activities may recommence in coordination with CDFW. The bat avoidance plan should utilize seasonal avoidance, phased construction as well as temporary and permanent bat housing structures developed in coordination with CDFW.

COMMENT 4: Fish Passage Assessment

Issue: Senate Bill 857 (SB-857), which amended Fish and Game Code 5901 and added section 156 to the Streets and Highways Code states in section 156.3, "For any project using state or federal transportation funds programmed after January 1, 2006, [Caltrans] shall insure that, if the project affects a stream crossing on a stream where anadromous fish are, or historically were, found, an assessment of potential barriers to fish passage is done prior to commencing project design. [Caltrans] shall submit the assessment to the [Department of Fish and Wildlife] and add it to the CALFISH database. If any structural barrier to passage exists, remediation of the problem shall be designed into the project by the implementing agency. New projects shall be constructed so that they do not present a barrier to fish passage. When barriers to fish passage are being addressed, plans and projects shall be developed in consultation with the [Department of Fish and Wildlife]."

Recommendations: CDFW recommends discussing the following location as it pertains to I-880 and fish passage. Location 1, Ward Creek (I-880; PM 14.2, Alameda County), Fish Passage Assessment Database ID# 760995, fish barrier status: unassessed. The fish passage section should discuss the current status of the crossing locations noted in the California Fish Passage Assessment Database, conduct first pass and or second pass fish assessments, as necessary, as well as provide images of the upstream and downstream ends of water conveyance structures. CDFW requests a fish passage discussion section is included to address these potentially significant impacts through the following avoidance and minimization measure, which should be made a condition of approval by the lead agency:

Recommended Mitigation Measure 1: Fish Passage Assessment

To evaluate potential impacts to native fish species and fisheries resources, Caltrans shall submit the assessment to CDFW and add it to the CALFISH database. If any structural barrier to passage exists, remediation of the problem shall be designed into the project by the implementing agency. New projects shall be constructed so that they

Mr. Charles Winter
California Department of Transportation

8

March 1, 2021

do not present a barrier to fish passage. When barriers to fish passage are being addressed, plans and projects shall be developed in consultation with CDFW.

COMMENT 5: Light Impact Analysis and Discussion

Issue: Currently the proposed Project locations are situated in highly developed urban environments in the city of Hayward and Union City, but areas of natural habitat associated with Ward Creek, Old Alameda Creek and their associated floodplains do persist along the I-880 corridor. CDFW strongly recommends reducing artificial light outputs in the remaining natural areas within the Project boundaries including Ward Creek and Old Alameda Creek. Artificial lighting often results in light pollution, which has the potential to significantly and adversely affect biological resources. Unlike the natural brightness created by the monthly cycle of the moon, the permanent and continuously powered lighting fixtures create an unnatural light regime that produces a constant light output. Continuous light output for 365 days a year can have a cumulatively significant impact on fish and wildlife populations.

Evidence the impact would be significant: Night lighting can disrupt the circadian rhythms of many species. Many wildlife species use photoperiod cues for communication (e.g., bird song; Miller 2006), determining when to begin foraging (Stone et al. 2009), behavior thermoregulation (Beiswenger 1977), and migration (Longcore and Rich 2004). Artificial night lighting has also been found to impact juvenile salmonid overwintering success by delaying the emergence of salmonids from benthic refugia and reducing their ability to feed during the winter (Contor and Griffith 1995).

Recommendation: In segments of the Project that span Ward Creek and Old Alameda Creek or have the potential to direct lighting into those areas, CDFW recommends reducing the number of light poles by increasing the spacing from light pole source to light pole source within the proximity of those resources. In addition, utilizing light shielding, light output restrictions and the following measures may reduce the potentially significant impacts from artificial lighting sources within the state highway system:

Recommended Mitigation Measure 1: Light Output Limits

All LED's or bulbs installed as a result of the Project shall be rated to emit or produce light at or under 2700 kelvin that results in the output of a warm white color spectrum.

Recommended Mitigation Measure 2: Vehicle Light Barriers

Solid concrete barriers at a minimum height of 3.5 feet should be installed in areas where they have the potential to reduce illumination from overhead lights and from vehicle lights into areas outside of the roadway. Barriers should only be utilized as a light pollution minimization measure if they do not create a significant barrier to wildlife movement. Additional barrier types should be employed when feasible, such as privacy slats into the spacing of cyclone fencing to create light barriers for areas outside the roadway.

Mr. Charles Winter
California Department of Transportation

9

March 1, 2021

Recommended Mitigation Measure 3: Reflective Signs and Road Striping

Retro-reflectivity of signs and road striping should be implemented throughout the Project to increase visibility of roads to drivers and reduce the need for electrical lighting. Reflective highway markers have also been proven effective to reduce raptor collisions on highways in California's central valley if installed along highway verges and medians.

Recommended Mitigation Measure 4: Light Pole Modifications and Shielding

All light poles or sources of illumination that shall be new or replacement installations should be installed with the appropriate shielding to avoid excessive light pollution into natural landscapes or aquatic habitat with the Project corridor in coordination with the natural resource agencies. In addition, the light pole arm length and mast heights should be modified to site specific conditions to reduce excessive light spillage into natural landscapes or aquatic habitat within the Project corridor. In areas with sensitive natural landscapes or aquatic habitat the lead agency should also analyze and determine in the updated IS/ND if placing the light poles at non-standard intervals has the potential to further reduce the potential for excessive light pollution caused by decreasing the number of light output sources in sensitive areas.

CONCLUSION

Thank you for the opportunity to provide comments and recommendations regarding those activities involved in the Project that may affect California's fish and wildlife resources. Likewise, we appreciate the opportunity to provide comments regarding those aspects of the Project that CDFW, by law, may be required to carry out or approve through the exercise of its own regulatory authority under the Fish and Game Code.

Questions regarding this letter or further coordination should be directed to Mr. Robert Stanley, Senior Environmental Scientist (Specialist), at (707) 428-2093 or Robert.Stanley@wildlife.ca.gov; or Mr. Wesley Stokes, Senior Environmental Scientist (Supervisory), at (707) 339-6066 or Wesley.Stokes@wildlife.ca.gov.

cc: State Clearinghouse No. 20210100214

REFERENCES

- Beiswenger, R. E. 1977. Diet patterns of aggregative behavior in tadpoles of *Bufo americanus*, in relation to light and temperature. *Ecology* 58:98–108.
- Biedenharn, D., Elliott, C. & Watson, C. 1997. The WES Stream Investigation and Streambank Stabilization Handbook. US Army Engineer, Mississippi. <http://chl.wes.army.mil/library/publications>

Mr. Charles Winter
California Department of Transportation

10

March 1, 2021

Contor R., Craig, Griffith, J.S. 1995. Nocturnal emergence of juvenile rainbow trout from winter concealment relative to light intensity. *Hydrobiologia* Vol. 299: 179-18.

Federal Highway Administration. 2009. Bridge Scour and Stream Instability Countermeasures: Experience, Selection and Design Guidance – Third Edition. Hydraulic Engineering Circular. No. 23.

Longcore, T., and C. Rich. 2004. Ecological light pollution - Review. *Frontiers in Ecology and the Environment* 2:191–198.

McCullah, J. et. al. 2005. National Cooperative Highway Research Program. Report 544.

Miller, M. W. 2006. Apparent effects of light pollution on singing behavior of American robins. *The Condor* 108:130–139.

Stone, E. L., G. Jones, and S. Harris. 2009. Street lighting disturbs commuting bats. *Current Biology* 19:1123–1127. Elsevier Ltd.